# Application Instructions

## FFY 2010 Section 319(h) Nonpoint Source Implementation Grant

Energy and Environment Cabinet
Division of Water, Nonpoint Source Section

**200 Fair Oaks Lane, 4th Floor**
Frankfort, Kentucky 40601
(502) 564-3410

# New for FFY 2010

## ***Important Change***

Project Proposals are now required and may be submitted at any time. To be eligible for FFY 2010 funding, the forms must be submitted by February 1, 2010

The Project Proposal Form can be accessed at:

**http://www.water.ky.gov/publicassistance/funding/nps/Grant+Application+Information.htm**

**Revised, September 2009**

# TABLE OF CONTENTS

# Application Instructions

*Please read the **entire** Grant Guidance Document before beginning the process of filling out the Project Application*

The project application provides all the details, products and outcomes of the project. Two important reasons for submitting a complete and correct application are:

**a.** The application will be used in the ranking process to determine which projects receive funding.

**b.** The application will be used as the basis for developing the legal contract.

Because the application will be the basis of the legal contract, it should be written not as a proposal but as a project that will be carried out. For example, use "will" instead of "would," and do not use "proposal" or "propose."

After you have submitted the Project Proposal form, NPS program staff will contact you to discuss project ideas, clear up any doubts about eligibility or clarify any of the information in the guidance document that may be unclear.

A separate application must be submitted for each project for which you are seeking funding. Because "combination projects" cannot be evaluated and ranked effectively, they will not be accepted. Please contact the NPS Section if you are unsure whether you are developing a "combination project" or not.

All information presented as "fact" must be followed by a literature citation.

**Please use 12-point font or larger when filling out the application. You are restricted to the space provided on the application unless specified otherwise in these instructions.**

General instructions for filling out electronic forms:

- Create additional rows by selecting the last cell in the table you wish to expand (lower right corner), and press the Tab key.
- Check boxes can be selected by double clicking a box and select "checked" from the menu.
- Insert text by clicking on the line between each numbered section, press the "Enter" key, and begin typing. Please leave at least one blank line between sections. *Please take care not to re-number the sections, as this will cause great confusion during the review and ranking process.

The following instructions are numbered to correspond with the numbered items on the project application form.

## Section 1 –

## Project Title

The project title should uniquely identify and describe the project. Choose a title that can be used consistently for the duration of the project. We will use the same title when publicizing the project, so choose a title that project area residents would be able to recognize if the news media were to provide coverage. The title should be no longer than one typewritten line in length. Also, avoid the use of overly technical language or acronyms

that would be difficult for the general public to understand.

## Section 2 – Lead Agency and Primary Contact Information

Identify the "lead agency," which is the single entity (institution, organization, etc.) that will be responsible for managing the project. The lead agency will be responsible for ensuring that all project activities are carried out and for entering into a legal contract. Also identify the "primary contact" that is the head of the lead agency and will be included in major project communications. Provide the address, telephone number, fax number and email address of the lead agency.

## Section 3 – Project Manager

Identify the project manager who will handle all routine correspondence and communications with NPS Program staff. The project manager will generally be responsible for day-to-day project activities and will act as the single-point-of-contact to the NPS Program staff. Provide the address, telephone number, fax number and email address of the project manager.

## Section 4 – Project Start Date

Estimate a project start date. The date listed here is only a tentative date. The actual start date is determined when the grant is awarded from EPA and a legal contract has been executed between the lead agency and the Environmental and Public Protection Cabinet.

## Section 5 – Project End Date

Estimate a tentative project end date. The actual end date is determined when the grant is awarded from EPA and a legal contract has been executed between the lead agency and the Energy and Environment Cabinet. Project duration should be 1 – 3 years. For further details, contact the Nonpoint Source Section. KDOW recommends that your project be completed in the shortest reasonable time frame possible.

## Section 6 – Fiscal Summary

Provide a summary of the Section 319(h) funds and non-federal match needed to complete the project. Section 319(h) funds and non-federal match funds are calculated as a percentage of the total project budget. They can be calculated by using one of the following three formulas:

**Use when the total project dollar amount needed is known** – If you know the total dollar amount (federal + non-federal match) that will be needed to complete the project, then multiply that amount by 40% to calculate how much of the total project amount will need to be non-federal match. For example: $250,000 (the total dollar amount) x .40 (the required non-federal match percent) = $100,000 (the amount of the total dollars that must be non-federal match). The difference between these two numbers is the amount of 319(h) federal funds that can be requested.

**Use when 319(h) federal dollar amount being requested is known** – If you know the 319(h) federal fund amount that you are wanting to request, then divide that amount by 60% to calculate what the total dollar amount (federal + non-federal match) will be. For example: $150,000 (the federal dollar amount being requested) ÷ .60 = $250,000 (the total dollar amount for the project). The difference between these

two numbers is the amount of non-federal match dollars that would be required.

**Use when non-federal match dollar amount being contributed is known** – If you know the non-federal match dollar amount that you can contribute, then divide that amount by 40% to calculate what the total dollar amount (federal + non-federal match) will be. For example: $100,000 (the non-federal dollar amount being contributed) ÷ .40 = $250,000 (the total dollar amount for the project). The difference between these two numbers is the amount of 319(h) federal funds that can be requested.

Remember that a 40% non-federal match must be provided for the application to be considered for funding.

## Section 7 – What Type of Project

Select the type of project you are applying for. If it is not one of the four listed examples then select "other" and describe the type of project it will be.

**Watershed-Based Plans:** A Watershed-Based Plan (WBP) may be used as a guide for TMDL implementation where one has been developed or on an impaired stream where the TMDL is not yet developed.

A plan should be based on and include the information contained in the Watershed Data Analysis Report (WDAR). WBPs must contain the elements identified in Section III, Part D, *Components of a Watershed-Based Plan, a-i* of the *Nonpoint Source Program and Grants Guidelines for States and Territories (USEPA 2003).* This EPA document may be found on the web at: http://www.epa.gov/fedrgstr/EPA-WATER/2003/October/Day23/w26755.htm.

The EPA Handbook for Developing Watershed Plans to Restore and Protect Our Waters can be downloaded at http://www.epa.gov/owow/nps/watershed_handbook/

Note: A Draft Watershed Planning Guidebook for Kentucky Communities is in the process of being finalized.

Small sub-watersheds should be targeted for Watershed-Based Plans.

WBPs are developed in two stages: the first stage is the development of a Watershed Data Analysis Report; in stage two, a comprehensive plan should be completed.

WBP applications are not required to include an implementation component; however, implementation is the goal of creating a plan and must be addressed in the planning document.

**Watershed Data Analysis Report**: WDARs are the required first stage of developing a WBP. The WDAR should include all sources and causes of impairments and threats to the watershed, a determination of the current pollutant loads and the load reductions needed to meet the water quality standards.

They must contain the required element "a" identified in Section III D of the *Nonpoint Source Program and Grants Guidelines for States and Territories* (USEPA 2003). This EPA document may be found on the web at: http://www.epa.gov/fedrgstr/EPA-WATER/2003/October/Day-23/w26755.htm A WDAR may be used for TMDL development.

**Watershed-Based Plan Implementation:** Watershed-Based Plan (WBP) Implementation projects must implement the nonpoint pollution control measures identified in a DOW/NPS Section accepted WBP (see WBP criteria above). Environmental data collection is required in all WBP Implementation projects as a measure of project success.

In addition, projects addressing in-stream reductions of nonpoint source pollutants are required to report annually on estimated load reductions resulting from implementation of the project. Models are available for use in completing this requirement. For more information contact NPS program staff. The Division of Water will assist the applicant in determining if this requirement applies to your project and how to meet the reporting requirement.

**BMP Technology Demonstration:** A BMP installed as a technology demonstration must educate citizens, officials, agency representatives, and others about the NPS pollution problem and the BMP technology. Site-specific demonstrations are usually focused on hard-to-sell BMPs (e.g., riparian areas), innovative BMPs, and holistic BMP efforts (whole farm planning). The demonstration (or technology transfer) component can be achieved through field days, tours, brochures, newspaper articles, television, radio, etc.

In addition, projects involving BMP implementation are required to report annually on estimated load reductions resulting from implementation of the BMP(s). Models are available for use in completing this requirement. For more information contact NPS program staff. The Division of Water will assist the applicant in determining if this requirement applies to your project and how to meet the reporting requirement.

**Education/Outreach Technology Transfer:** These projects seek to modify behavior by raising awareness, developing programs that utilize social marketing as a change agent and providing technical training on NPS issues. Education projects can be directed toward adult or K-12 audiences or as outreach to non-formal audiences. Technology transfer projects deliver technical information (materials, workshops, training, etc.) to audiences that will implement appropriate BMPs. Projects should contain elements that will direct behavior change.

## Section 8 – River Basin

Select the river basins that will be affected by the project, or "statewide" for statewide projects. If your project is in an Ohio River tributary, check "Ohio Tributary" and the corresponding Basin Management Unit.

## Section 9 – Geographic Coverage

Select the single geographic coverage that best fits the project area. Select "Watershed" if the project area is defined by a discreet watershed boundary. Select "Regional" if the project is composed of areas with a common condition (e.g., karst areas, river basin). Select "Statewide" if the project is to benefit the entire state (e.g., six workshops held throughout the state and drawing from a statewide audience is a statewide geographic coverage).

## Section 10 – NPS Pollutant(s) to be addressed

Check all of the NPS pollutants that will be addressed by the project. Write in any other pollutants the project will be addressing that are not included on the checklist.

## Section 11 – NPS Pollution Source(s) to be addressed

Check up to five NPS sources that will be addressed by the project. Include the percentage of each category that the project addresses (for example, 50% agriculture/50% forestry). The total percentage must equal 100%. See page 4 of the *Grant Guidance Document* for a list of nonpoint pollution sources.

## Section 12 – Project Area

For all projects, complete the first bullet addressing groundwater, springs, or karst. For projects with a discreet watershed focus that are marked as having a watershed geographic coverage in Section 9, complete the second bullet labeled "For Watershed Projects Only."

## Section 13 – Location

Provide sufficient information to accurately describe the project area. If the project area is the "upper portion of the East Fork of the Kentucky River watershed above the Highway 1234 bridge," for example, do not simply write "Kentucky River." Also include the size of the watershed in square miles. This information can be found at: http://kygeonet.ky.gov/

If your project includes site-specific components, such as BMPs or monitoring sites, a map must be included. The map must delineate the watershed and identify the locations of BMPs and monitoring sites or the specific area in which they will be placed. If the sites have already been selected, mark their exact locations on the map. If the precise sites are not yet known, encircle the smallest possible area within which they may be placed. You may submit a GIS-generated map or clearly mark the location(s) on a clean photocopy of a portion of a USGS 7.5-minute topographic quadrangle map. If a photocopy is used, display the name of the quadrangle clearly on the map itself, either front or back. Enclose the map as a stand-alone document. Do not refer to it in the text of your plan of work (Section 17), as this map is for internal use only and will not be transferred to EPA.

Along with a physical location description, designate which watershed(s), Hydrologic Unit Code(s) (HUC)[s], and County(ies), will be affected by the project. A HUC is a 6- to 14-digit code assigned to a particular drainage area. For statewide projects, it is not necessary to list HUCs or include topos. Regional projects should include at least an 8-digit HUC. For watershed projects, supply all 14-digit HUCs associated with your watershed area. HUCs may be obtained from your local conservation district office, Kentucky Geological Survey, U. S. Geological Survey, Kentucky Division of Water, U.S. Army Corps of Engineers. http://www.uky.edu/kgs/gis/hydro.html (requires geographical information systems [GIS] software)
or
http://cfpub1.epa.gov/surf/state.cfm?statepostal=KY.

## Section 14 – Project Summary

The Project Summary section is a brief description (abstract) of the project. The project summary is to be prepared in narrative format, not as a list. Address the following: problem, goal, objectives, activities and measures of success. Summarize each of these topics using one or two sentences for each. Since the summary will be included in a national database maintained by the EPA, it needs to be clear and concise.

Use no more than 2 pages to complete this section.

## Section 15 – Introduction/Background

The Introduction/Background explains and justifies why the project is important in controlling NPS pollution. This is the place you describe the need for your project **not** the activities or how to solve the problem.

This section provides background information for the project. Identify the problem, the source, the extent and include a summary of data that documents any impairment or need for protection. The Introduction/Background is the place to "sell" the importance of the project to the reviewers.

Use no more than 2 pages to complete this section.

## Section 16 – NPS Pollution Control Project Goal, Objectives and Activities

Identify the overall goal of the project and list the project objectives. The objectives describe what the project will accomplish by conducting an activity or by developing a product. For example, the goal of eliminating straight pipes might have an objective of raising awareness of straight pipe impacts on water quality. This objective might be achieved by activities such as installing two innovative wastewater treatment systems, conducting four field days and developing one program to educate the participants on how water quality is affected by straight pipes.

If the project involves developing a Watershed-Based Plan the activities that address criteria "a through i" (described in the EPA document referenced in Section 7 above) should be identified in this section. The nine minimum elements to be included in a watershed plan are outlined in detail in section 2.6 (pages 2-16 – 2-20) of the EPA Handbook for Developing Watershed Plans. This document can be downloaded at http://www.epa.gov/owow/nps/watershed_handbook/

All project activities, outputs, and deliverables must be listed and quantified in this section. Use an outline format to describe each activity/product that will be achieved for each objective under the Project Goal. This Section may be 1-3 pages in length.

Example of required formatting:

Goal: (Project Goal #1)

Objective: (Project Objective)

Activities: 1. (Project Activity #1)

2. (Project Activity #2)

## Section 17 – Describe the NPS Pollution Control Plan of Work

The Plan of Work describes, in narrative format, how specific activities will be

conducted. Explain how all project activities and deliverables will be accomplished.

The Plan of Work should enable the reader to have an understanding of the type of project that will be implemented and what will be accomplished by the project. Discuss all pertinent activities that will be a part of the project, including education/ outreach, behavior change, watershed planning, technical assistance, training and BMP implementation. Include a narrative discussion of how the project activities and/or tangible products will be produced by the project.

As you prepare the project Plan of Work, understand and be familiar with the "Criteria For A Successful Nonpoint Source Project" on which the project will be evaluated and with grant application conditions. If the project includes educational and technology transfer activities, discuss in detail the types of materials to be produced. Identify the target audience(s), message objective, and the most effective tools. Please consider local newspapers, radio, or television as an additional tool to get your message out. Ensure that the products identified are the best tools to meet the objective and that existing NPS materials are used (or modified) whenever possible. Contact NPS program staff for additional information on how to access existing materials.

Provide specifics regarding BMP demonstrations (presentations, field days, etc.). Describe how the demonstrations will be conducted. The demonstrations must transfer information about the BMPs (cost, pollution control effectiveness, installation requirements, maintenance requirements, other funding sources, etc.) to others. The goal is to persuade people to implement BMPs on their own (or with other funding sources). Identify the target audience and tailor the demonstrations to the audience in order to maximize the number of individuals affected by the demonstrations.

To ensure that the BMP demonstrations are as effective as possible, describe the advertising or invitation process (describe who will be invited and how the demonstrations will be advertised). Include a means of giving the NPS Program staff advance notice of the scheduling of any workshops, demonstrations, field days, etc., in order for us to help provide the opportunity for technology transfer.

If project activities include stream restoration, stream enhancement, and/or bank stabilization, your plan of work must include an assessment of the fluvial geomorphic instability. This should include a description of the watershed, and an assessment of stream reach (tributary) conditions. Describe the potential cause and extent of the stream disturbance(s). While we are not looking for a full assessment of all upstream tributaries, a description of all upstream disturbances that may impact the area addressed is needed (i.e., upstream channelization, denuded riparian areas, etc.).

When developing a stream restoration plan, the design must be based on fluvial geomorphologic principles so that the proposed restoration restores both biological and hydrologic function of a natural stream. Objectives of a stream restoration project (see Section 16) should include creating a naturally stable system that transports and stores its sediment, improves water quality and restores habitat.

Stream enhancement involves the improvement of a stream in its existing location with respect to aquatic habitat,

channel stability, flow or sediment transport dynamics, but falls short of full-scale restoration. Stream enhancement projects include riparian establishment, bank stabilization or in channel work. These components may be implemented individually or in combination depending on the type of project.

Streambank and wetland protection or restoration projects must include annual reporting of the linear feet of streambank, or acres of wetlands, protected or restored and sediment load reductions

Water quality monitoring, public involvement and project partners are all critical aspects of a plan of work. However, because of their importance, separate sections on the application are devoted to these aspects. Detailed descriptions for these aspects are provided in Sections 18, 19, and 20.

This Section may be 2 pages in length.

## Section 18 – Environmental Data Collection

A Quality Assurance Project Plan (QAPP) is required for all projects that involve environmental data collection as a measure of project success. It is critical to provide a brief summary of any environmental data collection efforts. The summary should include the number of sites, parameters to be collected, the frequency of collection, any statistical methods that will be used to analyze data, and a general overview of the data collection strategy. A QAPP must be submitted and approved by KDOW before any monitoring can be conducted.

## Section 19 – Public Involvement

Describe the level and extent of public involvement in implementing the project. While projects usually include pertinent agency partners, actual public involvement is often lacking. Recruiting and involving local citizens in pollution control initiatives can be critical to the overall success of the project. Local citizen involvement could include an existing water interest group, people who live in or near the project area, or teachers and their classes. Explain the role that citizens, landowners, stakeholders and/or the public will have in the project. Applicants are strongly encouraged to work with the River Basin Coordinator and River Basin Team in their project area. However, if questions about the 319(h) grant process arise, please contact one of the NPS staff listed on this document.

## Section 20 – Project Partners

Identify all the partners that will be involved in the project and their roles and responsibilities. Each project partner must have specific responsibilities identified in this section. Partners should be identified by agency/organization and position title. Avoid vague responsibilities such as “will be involved in the project” or “will assist with the project.” Additional pages may be used as needed.

In addition to completing this section of the application, **letters of participation from each identified partner are required.** The letters should be addressed to the project lead agency. The letters must include the partners intended involvement and the services they will contribute. Letters should be included with the application as a separate attachment. The original letters must be included with the hard copy application, and scanned copies must be submitted with the electronic application.

## Section 21 – Project Measures of Success

One of the most important and difficult aspects of a project is the development of appropriate measures of success. This is required for all Section 319(h)-funded initiatives.

Each objective listed in Section 16 should have at least one quantifiable item or tangible product to measure the success of the activity/product designed to accomplish the objective. One measure of success could relate to several objectives.

> The most appropriate choice for project success indicators depends upon the type of project planned.

For watershed projects that include BMP implementation, the measure of success is reducing the NPS pollutant load or improving water quality. In order to gauge effectiveness and success, water quality monitoring must be implemented for watershed projects that include BMP implementation.

For NPS education activities, an appropriate measure of success might be pre- and post- activity participant surveys to determine changes in attitudes, knowledge of BMPs, and awareness of the NPS problems and the likelihood of adoption of the BMP.

The following are some possible measures of success for NPS pollution control projects:

- Use of photographs and videos to document improvements.
- Measurable improvement in relevant chemical, physical, or biological water quality parameters.
- Calculated load reduction of sediment, phosphorous, nitrogen or other nonpoint pollutants as a result of BMPs implemented.
- Number of site-specific plans implemented for erosion and sediment control, nutrient management, pest management, etc.
- Percentage of "needed" BMPs implemented in watersheds of impaired/threatened waters.
- Completion of KDOW approved watershed data analysis report.
- Statistically based survey of public awareness, knowledge, and actions to measure changes in attitudes and behavior over time.
- Number of field days and attendees at field days, accompanied by a pre- and post-test designed to measure the changes in attitudes and the likelihood of adoption of the BMP.
- Completion of media productions such as DVDs, newspaper articles, PSAs, etc. (identify the topic, number distributed, intended outcome and to whom).

In describing how you will measure the project's success, keep in mind the "Criteria for a Successful Nonpoint Source Project."

## Section 22 – Milestone Schedule

The milestone schedule component explains the "when" aspect of the project. Think of the milestone dates as an estimated timeline for the life of the project. Milestones include all project activities, including interim steps, needed to implement the project. The more detailed your milestone schedule, the more helpful it will be in implementing and tracking project progress. Milestones should also include the number of outputs that will be produced as part of the project and the steps needed to produce them. The number of milestones

will vary considerably depending upon the type of project, the length of the project, and the number of activities.

The application must include a schedule of milestones and their expected beginning and completion dates. Milestones must be listed in chronological order according to the expected beginning date. Projects should plan to begin activities no earlier than July of 2010. Project milestones should be updated when the grant is awarded to more accurately reflect the project's realistic timetable.

The following milestones must be included in all applications:

If the project develops any materials that will be used for education, training, outreach, or technology transfer, add "*Submit draft* (insert generic name of material [e.g., video scripts, pamphlets, workshop agendas, field day agendas, announcements, fliers, training materials, handbooks, workbooks, manuals, newsletters, news articles, etc.] here) *to NPS Program staff for approval*" as a milestone for each product. If existing materials are used, include a copy of the product to be used.

For lengthy materials, including manuals, workbooks, video scripts, and handbooks, an outline must be approved by NPS Program staff prior to expending funds on first draft development.

Submit an Annual Report if requested by KDOW.

Submit three hard copies and one electronic copy of the Final Report and submit three hard copies and one electronic copy of all products produced by this project.

If applicable, the following types of milestones must be included:

Develop and submit a BMP Implementation Plan for NPS program staff approval.

Develop and submit a QAPP for KDOW approval.

Submit all reports required by QAPP

Submit advanced written notice to NPS Program staff for all educational public meetings, field days, workshops, etc.

Conduct (#) meetings

Hold (#) field days

Conduct (#) workshops

Please complete this section in list format (i.e., 1, 2, 3, etc.) with each milestone having an approximate beginning and ending date. Additional pages may be used as needed.

**NOTE: NO** project activities can begin before the grant is awarded, all grant conditions are met, and the legal contract is executed.

## Section 23 – Reference/Literature Cited

List supporting citations (references) for statements of fact included in the application. For example, provide references for statements such as "Tourism is a major economic resource…" "…identifies Big Lake as an NPS-impacted lake with threats…" (Smith 2004) or "…complaints of sewage discharges…" (Smith 2004) Because projects are evaluated and ranked by outside reviewers, it is important for the reviewers to know the source and accuracy of this information. See the reference section of this document for an example of citation format.

## Section 24 – Budget Summary

The Budget Summary describes the work in terms of expenditures for each of the budget categories. Use the total amount of funding, i.e., 319(h) funds plus non-federal match funds, to develop the Budget Summary.

All budgetary items must relate directly to project activities described in the plan of work (e.g., don't request funds for "field equipment" if you have not described activities that will use this type of equipment).

Complete the categories using the format that is contained within the application when developing the Budget Summary.

Refer to the following major categories for guidance:

**BMP Implementation**: Include costs associated with installing or implementing BMPs. Do not include costs associated with planning BMPs, providing BMP technical assistance, advertising or other activities not directly relating to putting the BMP "on-the-ground."

**Project Management**: Include costs associated with providing administrative, fiscal and technical oversight on project implementation. Include costs associated with all required invoicing and reporting. Be sure to include costs associated with preparation of the Final Report.

**Education, Training or Outreach**: Include all costs associated with public education/outreach, technical training or other types of technology exchange programs.

**Monitoring**: Include all costs associated with water quality monitoring. Do not include costs associated with for educational purposes.

**Technical Assistance**: Include all costs associated with providing technical water quality and BMP assistance to landowners and agencies.

**Other**: Use this category for costs that do not fit into the other categories. List the title of "Other" costs on the Budget Summary table.

## Section 25 – Detailed Budget

The Detailed Budget outlines how the federal and non-federal funds will be expended. Do not create new budget categories. Use the prescribed budget categories and format that is contained within the application. For an explanation of each category, see Section 26 called "Budget Narrative" for the details. The amounts in the "Total" column for the Detailed Budget must be the same as the "Total" column in the Budget Summary.

The federal reimbursement for a NPS pollution control project is 60% of the total project cost. Therefore, each project must provide 40% of the total project cost for non-federal matching funds.

## Section 26 – Budget Narrative

The Budget Narrative must justify and clarify **all** project expenses by providing supporting information that relates budget items to project activities. Explain how federal and non-federal match funds will be expended. **The Budget Narrative must specify the funding source(s) of non-federal match dollars used in the project.** Do not include information in this section that is already stated elsewhere (e.g., refer to the appropriate project activities in the Plan of Work; do not rewrite them). Refer to

the following accepted category descriptions for guidance on the level of information needed:

**Personnel** - List the position titles of the project staff, include any volunteers, and the number of years and hours (or percentage of time) to be contributed. Any subcontractor work goes in the Contractual Category. Include the time period (e.g., 0.5 per year (PY) over 3 years). If the personnel dollars that are budgeted are strictly salaries then add a statement that says no fringe is being charged to the project. However, if fringe is calculated within the personnel dollars, then the fringe percentage rate and amount need to be discussed in the narrative. Do not include indirect/overhead costs in this category. Discuss indirect/overhead charges in the Operating Costs category. Do not use names of individuals since these may change over the life of the project. Include the details of any non-federal match funds contributed in this category.

**Supplies** - Identify only those supplies under $500 that are significant in achieving the objectives of the project (e.g., monitoring supplies, educational supplies, etc.). Incidental supplies (e.g., pens, stamps, envelopes, etc.) should be included under the "Operating Costs" category. Include the details of any non-federal match funds contributed in this category.

**Equipment** - Identify any equipment with a value of $500 or more to be purchased, leased, donated, etc., under this category. List each piece of equipment and its cost separately.

Provide justification for the equipment as it relates to the accomplishment of project milestones and measures of success.

If purchasing is more expensive than lease/rental or borrowing from a private or governmental agency provide an explanation in the Budget Narrative. Include a cost analysis that shows the comparison used for the choice. Include the details of any non-federal match funds contributed in this category.

Provide detailed disposition procedures for all equipment purchases. This should include an analysis of the equipment's value and where it will be placed when the project ends. If the contractor is to retain equipment, include an explanation of how it will be utilized to limit NPS pollution.

**Contractual** - List all entities that will be subcontracted (hired) to perform an activity or service related to the project and describe those activities or services. Include the details of any non-federal match funds contributed in this category.

**Travel** - All travel must result in NPS pollution control benefits to the state of Kentucky. Explain all necessary travel, including who will need to travel (titles), the purpose, how far and all expenses included under this category (e.g., fuel, per diem, etc.). Typically, out-of-state travel cannot be supported with Section 319(h) funds. Contact NPS Program staff for clarification on specific out-of-state travel requests. Travel expenses are often included in an agency or organization's overhead/indirect rate. Be sure requested funds don't "double-dip"! Include the details of any non-federal match funds contributed in this category.

**Operating Costs** - List all indirect/overhead items, e.g., building space costs, utility costs, incidental supplies, travel, or any other indirect costs necessary for implementing the project. Include the indirect/overhead percentage rate and the details of any non-federal match funds contributed in this category.

**Other** - Provide details for other budget categories that do not fit into any of the suggested categories. Include the details of any non-federal match funds contributed in this category.

If your project includes any component of watershed-based plans, you may be required to attend the Kentucky Watershed Leadership Academy (KWLA). In your Budget allow $1,500 per person to attend the KWLA training in this category *See Section 27; Required Training Condition*

## Section 27 – Grant Application Conditions

Applicants must read and agree to comply with all applicable conditions listed in this section. **Failure to read, complete, and sign this section will result in the project being removed from further funding consideration.** Be sure to read and thoroughly understand these conditions. Contact NPS Program staff if you need additional guidance or clarification on any of these conditions.

### Required Training Condition

If your project includes any component of watershed-based plans, you may be required to attend the Kentucky Watershed Leadership Academy (KWLA). The KWLA project will train local leaders and provide them with the tools and skill sets to successfully champion the development and implementation of watershed-based plans. Thirty-four hours of required modules are designed to assist students with building skills in the areas of leadership, education and outreach, watershed analysis and management strategies. Students are also given an opportunity to explore a topic of their own choosing in a more in-depth manner through the completion of six (6) hours of elective modules. *See Section 26; Other*

### Education Materials Condition

If your project includes school-based educational components, it must conform to the current Kentucky Department of Education Program of Studies. For information contact Jenny Howard, KDOW Environmental Education Specialist, at jenny.howard@ky.gov.

All materials printed for your education and outreach program must conform to the North American Association for Environmental Education's (NAAEE) *Guidelines for Excellence in Environmental Education* and their *Guidelines for EE Materials K-12* (NAAEE 2004) (www.NAAEE.org).

### Material Review Condition

All existing materials and final drafts of all printed materials (e.g., announcements, fliers, handbooks, workbooks, public meeting agendas, training materials, manuals, pamphlets, newsletters, news articles, etc.), video scripts and other products must be submitted to NPS Program staff for review and approval prior to final product development. For lengthy materials an outline must be reviewed and approved by NPS Program staff prior to expending funds on first draft development. Review and approval of new, as well as existing, materials ensures that the most appropriate and up-to-date educational materials are being used.

### Quality Assurance Condition

If the project includes the collection of environmental data, (e.g., assessment monitoring and watershed projects), then a Quality Assurance Project Plan (QAPP),

standard operating procedures (SOPs) and a Quality Evaluation Report are required. These quality assurance documents are grant requirements and must be reviewed and approved by KDOW before data collection activities may begin.

All monitoring activities conducted as a part of a project must be consistent with this approved documentation. Guidance and templates are available for development of quality assurance documentation.

## BMP Implementation Plan Condition

If the project includes BMP implementation, a BMP Implementation Plan must be submitted to the NPS program staff for review and approval. The plan must be submitted (as a milestone) and approved before the expenditure of any BMP funds. Do not submit the BMP Implementation Plan with the application.

The BMP Implementation Plan will include:

1. A list of BMP technologies to be installed.
2. A description of the technology selection process, the estimated cost and relative treatment efficiency. Include provisions for ongoing operation and maintenance required for the BMP to operate efficiently for the normal expected useful life of the practice.
3. A description of how BMPs will be targeted to specific locations. As BMPs are implemented, a map(s) clearly showing the BMP locations must be submitted to the DOW. Provide a means of notifying the Division of Water, NPS Section, prior to BMP implementation.
4. A financial plan of action that describes how financial assistance will be provided and the type of maintenance agreement that will be made with the landowner. This agreement must include provisions allowing EPA and the State "to periodically inspect the practice during the life span of the project to ensure that operation and maintenance are occurring, and if it is determined that participants are not operating and maintaining practices in an appropriate manner, EPA or the State respectively, will request a refund for that practice supported by the grant" (FY04 EPA Grant Guidelines (IV, D, 8)). A statement that ensures that all agricultural or forestry BMPs will, at a minimum, comply with the Kentucky Agriculture Water Quality Act and/or the Forest Conservation Act.

No BMP implementation activities shall occur until the Division of Water has approved the BMP Implementation Plan.

## Onsite Wastewater Condition

1. Onsite wastewater projects which serve more than one residence or establishment must include provisions for ongoing operations and maintenance.
2. Projects involving single residential systems should include a homeowner education component addressing operation of their system.
3. All onsite wastewater projects must include completion of a groundwater protection plan

## Animal Feeding Operation (AFO) Condition

Any Animal Feeding Operation (AFO) that receives §319(h) funds will implement a nutrient management plan that:

1. Provides and maintains buffers or equivalent practices.
2. Diverts clean water away from animal manure storage structures and Confined Animal Feeding Operation (CAFO) yards.
3. Prevents direct contact of confined animals with waters of the Commonwealth.
4. Addresses animal mortality disposal.
5. Addresses chemical disposal.
6. Addresses manure testing.
7. Addresses record keeping and testing.
8. Addresses proper storage capacity and maintenance of animal waste-storage structures/facilities.
9. Addresses rates and timing of land application of manure and wastewater.

An AFO is defined as any lot or facility where animals are stabled or confined and fed or maintained for a total of 45 days out of the 12-month period and where crops, vegetation, forage growth, or post-harvest residues are not sustained over any portion of the lot or facility over the growing season.

## Stream Restoration/Bank Stabilization Condition

If project activities include stream restoration or bank stabilization, the BMP Implementation Plan must specify or document the **procedures** that will be used to develop a restoration design. The Plan should:

1. Describe the extent of the design.
2. Relate the restored area to the extent of disturbance.
3. Identify how transitions upstream and downstream from the restoration area will be planned.
4. Describe any channel change and potential changes in flooding.

Bank stabilization techniques may include bioengineering, live staking, tree planting, rock toes, and improving access to the floodplain. Hard revetment such as extensive rip rapping, concrete, grout, gabions or retaining walls should **not** be included in the design.

The BMP Implementation Plan must also include a post-restoration assessment that evaluates the success (stability, duration, etc.) of the restoration techniques. The post-restoration assessment should provide a means for periodic and long-term evaluation of the restoration sites.

Please note: a QAPP plan may be required.

## GIS Condition

Projects that include Geographic Information System (GIS) activities must agree to the following condition:

All geospatial data created will be consistent with Federal Geographic Data Committee (FGDC) endorsed standards.

Information on federal endorsed standards can be obtained from the web site www.fgdc.gov under the topics of "standards" and "Standard Documents by Sponsoring Agencies."

## Annual Report Condition

Annual Reports are used to report load reductions and other environmental successes to the USEPA.

KDOW may request an Annual Report for a project. The report should include all project activities and progress completed in the federal funding year (FFY), October 1st through September 30th. Projects that have implemented BMPs in the FFY must provide load reduction information. For more details please contact the NPS Section.

## Project Partners Condition

Federal funds shall not be used as match for §319(h) projects. The applicant must contact all project partners and obtain their commitment to participate prior to submitting an application. Letters of participation are required from all listed partners.

## Section 28 – Application Signature

Applications must be signed and dated. Applications that are not signed will not be considered for funding.

# MEETING QUALITY ASSURANCE REQUIREMENTS

Kentucky Division of Water operates using a quality system. Under this system, program operations and grants administered by (or through) Kentucky are required to follow certain practices to achieve quality products.

Quality assurance (QA) refers to a system of activities that ensure a program achieves goals and objectives. It involves setting policy, procedures and control measures that address an organization's operations. Quality control (QC) refers to the technical procedures followed in the field and in the laboratory to produce data of known and adequate quality standards.

Elements of quality assurance include the *Quality Management Plan* (QMP) (signed and approved by the U.S. Environmental Protection Agency), individual Quality Assurance Project Plans (QAPPs), Standard Operating Procedures (SOPs), and Quality Evaluation Reports.

All environmental data projects must develop a QAPP, SOPs, and Quality Evaluation Report(s).

**QAPPs**

QAPPs are required for all projects that involve the collection of environmental data (KDEP 2005).

QAPPs document that proper planning has occurred prior to collection of data, describe the implementation of a project, provides for oversight and assessment of project operations, and determine actions based on the outcome of the data. The QAPP is applicable to all types of data collection, including physical, chemical, biological, and fluvial geomorphologic.

The QAPP is a "stand alone" document. It is reviewed and approved separately, and with a different perspective than the project application. Therefore, in order to expedite the review process of both documents, certain information will be required in each document. By supplying the information in both documents, time-consuming cross-referencing is eliminated and reviews can be accomplished in a timely manner.

All sections of the QAPP must be completed or contain an explanation of why the incomplete section is not applicable to the project.

**SOPs**

SOPs must be submitted to support QAPP operations. SOPs document how an activity is performed, who performs the tasks, what checks are in place for the activity and expected outcomes.

All project procedures must be developed and/or followed using SOPs. If the project uses an existing SOP, supporting documentation must be included and approved along with the QAPP. If SOPs are to be developed, proper documentation (literature references or cited data studies) of all procedures must be included.

**Quality Evaluation Reports**

Quality Evaluation Reports ensure data is of the type and quality that is acceptable to all parties.

Quality Evaluation Reports are developed during the project to assure that all operations meet data quality

objectives. Quality Evaluation Reports document the quality control measures, report on the outcomes of the QC data, and discuss events or occurrences throughout the project that may affect the quality of the data.

The EPA has developed guidance documents for writing QAPPs and SOPs, as well as manuals on developing elements of QAPPs (e.g., data quality objectives, sample plans).

Use the following specific references when writing a QAPP, SOPs or developing data planning operations.

The following Web site has links and information to use in writing quality assurance documents, EPA Quality System (www.epa.gov/quality) including:

- Requirements for Quality Assurance Project Plans (QA/R-5)
- Guidance for Quality Assurance Project Plans (QA/G-5)
- Guidance for Preparing Standard Operating Procedures (QA/G-6)
- Guidance on Systematic Planning, using the Data Quality Objectives Process (QA/G-4)
- Guidance on Choosing a Sampling Design for Environmental Data Collection (QA/G-5S)

The Kentucky Division of Water also has guidance and templates to use in developing a QAPP, SOPs and the Quality Evaluation Report.

Using these templates and guidance documents will help assure a timely review of QAPPs, and will provide a consistent framework for all grant applicants to use.

Access the following link for Kentucky's guidance documents Kentucky Quality System (www.water.ky.gov/QualAssurance). A summary of QAPP elements and examples of quality control measures are provided on the following page.

For specific questions on the QAPP, SOPs, or Quality Evaluation Report, please contact Lisa Hicks at lisa.hicks@ky.gov, or at 502-564-3410 extension 4946.

Recommended literature which may be helpful in preparing a QAPP include the following:

Methods for assessing the biological integrity of surface waters. (KDOW 2002c).

Monitoring guidance for determining the effectiveness of nonpoint source controls. (USEPA 1997a). Refer to Chapter 5, *Quality Assurance and Quality Control.*

Standard methods for the examination of water and wastewater. (APHA et al. 1998).

Rapid bioassessment protocols for use in wadeable streams: periphyton, benthic macroinvertebrates, and fish. (USEPA 1999)

Techniques for tracking, evaluating and reporting the implementation of nonpoint source control measures: agriculture. (USEPA 1997b).

Techniques for tracking, evaluating and reporting the implementation of nonpoint source control measures: forestry. (USEPA. 1997c).

Techniques for tracking, evaluating and reporting the implementation of nonpoint source control measures: urban. (USEPA 2001b).

Guidance for data quality assessment: practical methods for data analysis. (USEPA 2000).

National handbook of water quality. (USDA 1996).

**Quality Control Activities**

Collection and analysis of duplicate and split samples
Preparation of and analysis of blank and spike samples
Regular inspection and calibration of field and analytical instrumentation
Regular inspection of reagents and supplies

**Quality Assurance Activities (corresponds to QAPP Sections)**

Project Management
- Title Page
- Organization of Project
- Data Quality Objectives
- Training
- Documentation and Records

Data Generation
- Sampling Design
- Sampling Methods
- Analytical Methods
- Instrumentation and Inspection of Supplies

Assessment and Oversight
- Response Action
- Reports to Management

**Submittal Requirements**

Submit the QAPP:

- Electronically, or through regular mail. If e-mailed, a print copy of the signature page(s) must follow within 3 days.
- CD must accompany QAPP with supporting documentation (SOPs, literature models, maps, etc.)
- QA Evaluation reports electronically or regular mail.
- Documents should be formatted double-sided, with clear legible text and maps

# REFERENCES


APHA. American Public Health Association, American Water Works Association, and Water Environment Federation. 1998. Standard methods for the examination of water and wastewater. 20th Edition. American Public Health Association, American Water Works Association and Water Environment Federation, Washington, D.C.

Davenport, T. E. 1998. Examining the need for project evaluation. Water Division, U. S. Environmental Protection Agency, Region 5, Chicago, IL.

KDEP. Kentucky Department for Environmental Protection. 2005. Quality management plan. Kentucky Department for Environmental Protection, Natural Resources and Environmental Protection Cabinet, Frankfort, KY.

KDOW. Kentucky Division of Water. 2000. Kentucky nonpoint source management program – 2.0 for Federal fiscal years 2000-2005. Kentucky Division of Water, Natural Resources and Environmental Protection Cabinet, Frankfort, KY. Web address: http://www.water.ky.gov/NR/rdonlyres/5A7CBA73-915A-41A6-A3AD-4C92A4BA2D17/0/npsmgt.pdf

KDOW. 2008a. Integrated Report to Congress on Water Quality in Kentucky Volume I. 305(b) Assessment Results with Emphasis on the Kentucky River Basin Management Unit and Salt – Licking Rivers Basin Management Unit. Division of Water, Environmental and Public Protection Cabinet, Frankfort, KY. Web address: http://www.water.ky.gov/sw/swmonitor/305b/default.htm

KDOW. 2002c. Methods for assessing the biological integrity of surface waters. Kentucky Division of Water, Natural Resources and Environmental Protection Cabinet, Frankfort, KY.

NAAEE. North American Association for Environmental Education. 2004. Environmental Education Materials - Guidelines for Excellence. NAAEE Publications, Troy, Ohio.

NAAEE. 2004. Excellence in Environmental Education – Guidelines for Learning (K-12). NAAEE Publications, Troy, Ohio.

USEPA. United States Environmental Protection Agency. 1997a. Monitoring guidance for determining the effectiveness of nonpoint source controls. EPA841-B-96-004. U.S. Environmental Protection Agency, Office of Water, Washington, D.C.

USEPA. 1997b. Techniques for tracking, evaluating and reporting the implementation of nonpoint source control measures: I. Agriculture. EPA841-B-97-010. U.S. Environmental Protection Agency, Office of Water, Washington, D.C.

USEPA. 1997c. Techniques for tracking, evaluating and reporting the implementation of nonpoint source control measures: II. Forestry. EPA841-B-97-009. U.S. Environmental Protection Agency, Office of Water, Washington, D.C.

USEPA. 1999. Rapid bioassessment protocols for use in wadeable steams and rivers: periphyton, benthic macroinvertebrates, and fish, 2nd Edition. EPA841-B-99-002. U.S. Environmental Protection Agency, Office of Water, Washington, D.C.

USEPA. 2000. Guidance for data quality assessment: practical methods for data analysis. EPA600-R-96-084. U.S. Environmental Protection Agency, Office of Environmental Information, Washington, D.C.

USEPA. 2001a. EPA requirements for quality assurance project plans. EPA240-B-01-003. U.S. Environmental Protection Agency, Office of Environmental Information, Washington, D.C.

USEPA. 2001b. Techniques for tracking, evaluating, and reporting the implementation of nonpoint source control measures: III. Urban. EPA841-B-00-007. U.S. Environmental Protection Agency, Office of Water, Washington, D.C.

USEPA. 2003. Nonpoint Source Program and Grants Guidelines for States and Territories. Web address: http://www.epa.gov/fedrgstr/EPA-WATER/2003/October/Day-23/w26755.htm

USDA. United States Department of Agriculture. 1996. National handbook of water quality monitoring. United States Department of Agriculture, Natural Resources Conservation Service, Washington, D.C.

# NONPOINT SOURCE POLLUTION CONTROL PROGRAM CONTACTS

**Kentucky Division of Water**
**200 Fair Oaks Lane, 4th Floor, Frankfort, KY 40601**
**(502) 564-3410 (Telephone) (502) 564-9899 (Fax)**

## Watershed Management Branch Contacts

**James Roe .....ext. 4909**
Nonpoint Source Section Supervisor
Email: James.Roe@ky.gov

**Margi Jones.....ext. 4907**
Riparian/Stream Restoration/Sediment
Email: Margi.Jones@ky.gov

**Jenny Howard**.....**ext. 4936**
Environmental Education Specialist
Email: Jenny.Howard@ky.gov

**Lisa Hicks.....ext. 4946**
Quality Assurance Officer
Email: Lisa.Hicks@ky.gov

**Brooke Shireman...ext. 4996**
Urban/Technical Advisor
Email:Brooke.Shireman@ky.gov

**Vacant.....ext.**
Agriculture/Forestry Technical Advisor
Email:

## Grants Management Section Contacts

**Lisa Borders.....ext. 4807**
Grants Mgt. Section Supervisor.
Email: LisajBorders@ky.gov

**Daniel Bishop.....ext. 4814**
Grant Administrator and contract management for the odd year base grants. Email:
Daniel.Bishop@ky.gov

**Debra Day.....ext. 4813**
NPS Grant Administrator and contract management for the even year base grants.
Email: Deb.Day@ky.gov

## Kentucky Division of Conservation

(Sub-grantee for all agriculture and construction related 319(h) Projects)
**375 Versailles Road, Frankfort, KY 40601**
**(502) 573-3080 (Telephone) (502) 573-1692 (Fax)**

**Steve Coleman**
Division of Conservation, Director
Email: Steve.Coleman@ky.gov

**Angie Wingfield**
Program Coordinator
Coordinates with DOW, DOC staff and contractors for the 319(h) funds for Agriculture and Construction for base grants and incremental grants.
Email: Angie.Wingfield@ky.gov